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RAW SEQUENCE LISTING DATE: 12/29/2000
PATENT APPLICATION: US/09/462,480 TIME: 11:58:22

Input Set : A:\ES.txt
Output Set: N:\CRF3\12292000\I462480.raw

3 <110> APPLICANT: GICQUEL, BRIGITTE
4 BERTHET, FRANCOIS-XAVIER
5 ANDERSEN, PETER
6 RASMUSSEN, PETER BIRK
8 <120> TITLE OF INVENTION: POLYNUCLEOTIDE FUNCTIONALLY CODING FOR THE LHP PROTEIN FROM MYCOBACTERIUM
9 TUBERCULOSIS, ITS BIOLOGICALLY ACTIVE DERIVATIVE FRAGMENTS, AS WELL AS METHODS
10 USING THE SAME
12 <130> FILE REFERENCE: 0660-0165-0XPCT
14 <140> CURRENT APPLICATION NUMBER: 09/462,480
15 <141> CURRENT FILING DATE: 2000-03-06
17 <150> PRIOR APPLICATION NUMBER: PCT/IB98/01091
18 <151> PRIOR FILING DATE: 1998-07-16
20 <150> PRIOR APPLICATION NUMBER: 60/052,631
21 <151> PRIOR FILING DATE: 1997-07-16
23 <160> NUMBER OF SEQ ID NOS: 34
25 <170> SOFTWARE: PatentIn version 3.0
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 1277
29 <212> TYPE: DNA
30 <213> ORGANISM: Mycobacterium tuberculosis
32 <400> SEQUENCE: 1
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35 gaegaggaag ccgcgcagat ggccgtcgctc ggcaccagtc cgctgtcgaa ccatccgttg 120
37 gctgggtatc caggccccaa cggccggccggq ggccgtcgctc gcgcggggcgt gctaccctggc 180
39 gcaagggttgggt cgttgcacccg ccggccggctg atgttcgtgg tgcgtcgaaa ggcgggttggcc 240
41 ccctccggtya tgccggccggc tggtccggta tgcgtcgatc cgggtggccgc cgctccgggt 300
43 ggtccgggaaq cgatggggcca ggggtcgcaa tccggccggct ccacccggccc ggggtcggtc 360
45 gcgcggcgeac cgctccggca ggacgtgtaa gaagacgacgg aggacgactg ggacgaagag 420
47 gacgtatggt gagtcgtcccgta aatgtacaaca gacttccggc ccacccgggc cggaaactt 480
49 gccaacattt tggcgagggaa gttaaagaga gaaatgtggc cagcatggca gagatggaga 540
51 cccatggccgc taccctgggg caggaggccgg gtaalttgcg gggatctcc ggcgaccctga 600
53 aaaccccgat cgaccagggtg yagltgcacgg cagggtcggtt gcaaggccgg tggccggccgg 660
55 cggcggggac gggccggcccg gcccgggtgg tgcgttccca agaagcagcc aataagcaga 720
57 agcaggaaact cgacgaaata tgcacgaaata ttgcgtcgaccc cggcgtccaa tactcgaggg 780
59 ccggcggggaa gcaacggcggcggcgtcgctcc cgcggccggcc gtcgtcgatc gtaataatcg 840
61 aaaggaaacgg agcaaaaaaca tgacagagca gcaatggat ttcgtcggtt tggggccgc 900
63 ggcaacggcc accccggaa atgcacggat catttcgttc ctcgtcgatc gggggaaacca 960
65 gtccctgacc aagctcgccgg cggccgtgggg cggtagcggt tggggccgtt accagggtgt 1020
67 ccagcaaaaaa tggggacggcc cggccgtgggg cgtgtggaaac acctggccgg 1080
69 gacgtatcgcc gaaaggccggcggcggccgtt ttcgtcgatc gggatcggtt acctggccgg 1140
71 cgcatagggc aacccggatc tgcgtcgatggaa tggggatcggtt cggatcggtt cggatcgac 1200
73 ctccctggggccgtt ttcgtcgatc gggatcggtt atacgttttgc ggcacactcg aggggttgc 1260
75 atggggccgg actacgaa 1277
78 <210> SEQ ID NO: 2
79 <211> LENGTH: 524
80 <212> TYPE: DNA
81 <213> ORGANISM: Mycobacterium tuberculosis

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83 <400> SEQUENCE: 2		
84 ctgcacgagg tgacgtcggtt gttcagccag gtggggggca ccggcgccgg caacccagcc	60	
85 qacyaaqqaq cccgcqcaqat gggccctqctc ggccacccgtc cgcttgcqaa ccatccgctq	120	
86 qctgggtggat caggcccccaq cggggggccqg qgcctgtgc ggcggggactg getacctggc	180	
87 qcagggtgggt cgttgaccggc cacycccgcty atgttcctcgc tgatcgaaa gcccgggtgc	240	
88 ccctcggtga tggccggggc tggccgggta tcgtcggtga cgggtggcgc cgcctccggtg	300	
89 qgfcgcggqaq cqatqggcca qggttcqcaaa tccqacggct ccaccagccc gggctqgtc	360	
90 qcgcggggcac cgcctccggca qgacgtgaa gaagacgacg aggacgactg ggacgaaagaa	420	
91 gacgactgtt gagctcccgat aatgacaaca gacttcccgcc acaccggggc cggaaagactt	480	
92 gccaacacattl tggcggggaa gytuaagaga gaaagttagtc cagc	524	
103 <210> SEQ ID NO: 3		
104 <211> LENGTH: 481		
105 <212> TYPE: DNA		
106 <213> ORGANISM: Mycobacterium tuberculosis		
108 <400> SEQUENCE: 3		
109 ctgcacqcaqg tgacgtcggtt gttcagccag gtggggggca ccggcgccgg caacccagcc	60	
110 qacgaaqqaq cccgcqcaqat gggccctqctc ggccacccgtc cgcttgcgaa ccatccgctg	120	
111 gctgggtggat caggcccccaq cggggggccqg ggcttgcgtgc ggcggggactg getacctggc	180	
112 qcagggtgggt cgttgaccggc cgcctccggctg atgttcctcgc tgatcgaaa gcccgggtgc	240	
113 ccctcggtqa tggccggggc tggccgggta tcgtcggtga cgggtggcgc cgcctccggtg	300	
114 ggtccggggag cgatggggca qggttcqcaaa tccggggcgtt ccaccagccc gggctqgtc	360	
115 qcgcggggcac cgcctccggca ggagcgtgaa gaagacgacg aggacgactg ggacgaaagag	420	
116 gacgactgtt gagctcccgat aatgacaaca gacttcccgcc acaccggggc cggaaagactt	480	
117 tg	481	
128 <210> SEQ ID NO: 4		
129 <211> LENGTH: 302		
130 <212> TYPE: DNA		
131 <213> ORGANISM: Mycobacterium tuberculosis		
133 <400> SEQUENCE: 4		
134 atggcagaga tgaagacgca tggccgttacc ctcggggcagg aggcaggtaa ttgcgagccg	60	
135 atctccqgqcg acctgaaaaac ccagatcgac cagggtggagt cgacggcagg ttcgttgcag	120	
136 ggcgcgtqgc gggggggggc qgggacggcc gcccaggccg cgggtggcgc cttccaagaa	180	
137 qcagccaaata aycagaayca ggaacttcgac gagatctcgta cgaatattcg tcaggccgc	240	
138 qtccaaatact cgaggggccga cgaggaggcga caqcgaggcgc tgccttcgca aatgggcttc	300	
139 tg	302	
147 <210> SEQ ID NO: 5		
148 <211> LENGTH: 100		
149 <212> TYPE: PRT		
150 <213> ORGANISM: Mycobacterium tuberculosis		
152 <400> SEQUENCE: 5		
154 Met Ala Glu Met Lys Thr Asp Ala Ala Thr Leu Gly Gln Glu Ala Gly		
155 1 5 10 15		
156 Asn Phe Glu Arg Ile Ser Gly Asp Leu Lys Thr Gln Ile Asp Gln Val		
157 20 25 30		
158 Glu Ser Thr Ala Gly Ser Leu Gln Gly Gln Trp Arg Gly Ala Ala Gly		
159 35 40 45		
160 Thr Ala Ala Gln Ala Ala Val Val Arg Phe Gln Glu Ala Ala Asn Lys		
161 50 55 60		
162 Gln Lys Gln Glu Leu Asp Glu Tle Ser Thr Asn Ile Arg Gln Ala Gly		

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167 65      70      75      80
169 Val Gln Tyr Ser Arg Ala Asp Glu Glu Gln Gln Ala Leu Ser Ser
170           85       90       95
172 Gln Met Gly Phe
173           100
175 <210> SEQ ID NO: 6
176 <211> LENGTH: 49
177 <212> TYPE: PRT
178 <213> ORGANISM: Mycobacterium tuberculosis
180 <400> SEQUENCE: 6
182 Met Ala Glu Met Lys Thr Asp Ala Ala Thr Leu Gly Gln Glu Ala Gly
183 1           5       10       15
185 Asn Phe Glu Arg Ile Ser Gly Asp Leu Lys Thr Gln Ile Asp Gln Val
186           20       25       30
188 Glu Ser Thr Ala Gly Ser Leu Gln Gly Gln Trp Arg Gly Ala Ala Gly
189           35       40       45
191 Thr
194 <210> SEQ ID NO: 7
195 <211> LENGTH: 42
196 <212> TYPE: PRT
197 <213> ORGANISM: Mycobacterium tuberculosis
199 <400> SEQUENCE: 7
201 Gin Glu Ala Ala Asn Lys Gln Lys Glu Leu Asp Gly Ile Ser Thr
202 1           5       10       15
204 Asn Ile Arg Gln Ala Gly Val Gln Tyr Ser Arg Ala Asp Glu Glu Gln
205           20       25       30
207 Gln Gln Ala Leu Ser Ser Gln Met Gly Phe
208           35       40
210 <210> SEQ ID NO: 8
211 <211> LENGTH: 21
212 <212> TYPE: PRT
213 <213> ORGANISM: Mycobacterium tuberculosis
215 <400> SEQUENCE: 8
217 Gin Glu Ala Gly Asn Phe Glu Arg Ile Ser Gly Asp Leu Lys Tyr Thr
218 1           5       10       15
220 Gin Ile Asp Gln Val
221           20
223 <210> SEQ ID NO: 9
224 <211> LENGTH: 16
225 <212> TYPE: PRT
226 <213> ORGANISM: Mycobacterium tuberculosis
228 <400> SEQUENCE: 9
230 Gly Asp Leu Lys Thr Gln Ile Asp Gln Val Glu Ser Thr Ala Gly Ser
231 1           5       10       15
233 <210> SEQ ID NO: 10
234 <211> LENGTH: 16
235 <212> TYPE: PRT
236 <213> ORGANISM: Mycobacterium tuberculosis
238 <400> SEQUENCE: 10

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Input Set : A:\ES.txt
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240 Gly Ser Leu Gln Gln Trp Arg Gly Ala Ala Gly Thr Ala Ala Ala
241 1 5 10 15
243 <210> SEQ ID NO: 11
244 <211> LENGTH: 16
245 <212> TYPE: PRT
246 <213> ORGANISM: Mycobacterium tuberculosis
248 <400> SEQUENCE: 11
250 Gln Glu Ala Ala Asn Lys Gln Lys Glu Leu Asp Glu Ile Ser Thr
251 1 5 10 15
253 <210> SEQ ID NO: 12
254 <211> LENGTH: 28
255 <212> TYPE: PRT
256 <213> ORGANISM: Mycobacterium tuberculosis
258 <400> SEQUENCE: 12
260 Ser Thr Asn Ile Arg Gln Ala Gly Val Gln Tyr Ser Arg Ala Asp Glu
261 1 5 10 15
263 Glu Gln Gln Gln Ala Leu Ser Ser Gln Met Gly Phe
264 20 25
266 <210> SEQ ID NO: 13
267 <211> LENGTH: 16
268 <212> TYPE: PRT
269 <213> ORGANISM: Mycobacterium tuberculosis
271 <400> SEQUENCE: 13
273 Arg Ala Asp Glu Glu Gln Gln Ala Leu Ser Ser Gln Met Gly Phe
274 1 5 10 15
276 <210> SEQ ID NO: 14
277 <211> LENGTH: 21
278 <212> TYPE: DNA
279 <213> ORGANISM: Artificial/Unknown
281 <220> FEATURE:
282 <221> NAME/KEY: misc_feature
283 <222> LOCATION: (...)
284 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
287 <400> SEQUENCE: 14
288 ctgcagcagg tgacgtcggtt g 21
291 <210> SEQ ID NO: 15
292 <211> LENGTH: 23
293 <212> TYPE: DNA
294 <213> ORGANISM: Artificial/Unknown
296 <220> FEATURE:
297 <221> NAME/KEY: misc_feature
298 <222> LOCATION: (...)
299 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA
303 <400> SEQUENCE: 15
304 ccgggtggcc gggaaatctg tgt 23
307 <210> SEQ ID NO: 16
308 <211> LENGTH: 23
309 <212> TYPE: DNA
310 <213> ORGANISM: Artificial/Unknown

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312 <220> FEATURE:  

313 <221> NAME/KEY: misc_feature  

314 <222> LOCATION: ()..()  

315 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA  

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320 actactttct cttttacct tcc 23  

323 <210> SEQ ID NO: 17  

324 <211> LENGTH: 39  

325 <212> TYPE: DNA  

326 <213> ORGANISM: Artificial/Unknown  

328 <220> FEATURE:  

329 <221> NAME/KEY: misc_feature  

330 <222> LOCATION: ()..()  

331 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA  

334 <400> SEQUENCE: 17  

335 qgggggatcc ggtaccagggt gacgtcggttgc ttcagccag 39  

338 <210> SEQ ID NO: 18  

339 <211> LENGTH: 39  

340 <212> TYPE: DNA  

341 <213> ORGANISM: Artificial/Unknown  

343 <220> FEATURE:  

344 <221> NAME/KEY: misc_feature  

345 <222> LOCATION: ()..()  

346 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA  

349 <400> SEQUENCE: 18  

350 qgggggtaacc ggatcctcggt agtccccgc catgacaac 39  

353 <210> SEQ ID NO: 19  

354 <211> LENGTH: 31  

355 <212> TYPE: DNA  

356 <213> ORGANISM: Artificial/Unknown  

358 <220> FEATURE:  

359 <221> NAME/KEY: misc_feature  

360 <222> LOCATION: ()..()  

361 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA  

364 <400> SEQUENCE: 19  

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368 <210> SEQ ID NO: 20  

369 <211> LENGTH: 31  

370 <212> TYPE: DNA  

371 <213> ORGANISM: Artificial/Unknown  

373 <220> FEATURE:  

374 <221> NAME/KEY: misc_feature  

375 <222> LOCATION: ()..()  

376 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic DNA  

379 <400> SEQUENCE: 20  

380 qgggggtaacc acgttgacgt cggttttag c 31  

383 <210> SEQ ID NO: 21  

384 <211> LENGTH: 32  

385 <212> TYPE: DNA

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

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Input Set : A:\ES.txt

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L:607 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34